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Not to be cited without prior reference to the FRS Marine Laboratory, Aberdeen

FRV *Alba na Mara*

Cruise 0109A

PROGRAMME

7- 21 January 2009

Loading: Fraserburgh

Unloading: Fraserburgh

In setting the cruise programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in FRS' Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the Cruise Report, to Iain Gibb and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

Personnel

A Weetman (SIC)

C Shand

A Tait

N Campbell

M Burns (7-13 January_

Gear

50 mm prawn trawl BT 149B.

Day grab and table

Towed TV sledge, umbilical towing cable and cameras (plus backup)

TV drop frame

Objectives

- To improve the definition of survey area (*Nephrops* suitable habitat) by allocating TV survey stations according to *Nephrops* fishing activity based on VMS data and catch composition thresholds.
- To visually confirm the presence of *Nephrops* and suitable habitat from video footage recorded from the towed sledge.

- To collect sediment samples at each station.
- To use trawl caught samples of *Nephrops* to record morphometric and biological information.
- The TV survey will also be used to collect data on other benthic fauna.

Estimated Days per Project: 15 Days MF01TA

Procedure

Stations will be positioned in relation to commercial fishing effort, and will cover grounds associated with trawlers targeting *Nephrops*, as indicated by VMS data. This may require stations to be located outwith normal surveyed areas. If weather conditions do not permit safe working conditions in the North Minch, the same criteria will be applied to the Moray Firth; however the North Minch is the preferred survey area.

A list of proposed stations for the survey will be made available to the ship's compliment prior to the cruise.

M Burns will leave the vessel on 13 January 2009. A suitable port for this to take place will be decided nearer the time, based on the location of the vessel in relation to progress of the study.

1. **TV Observations:** At each station a video camera mounted on the TV sledge will be towed across the seabed for approximately 5 minutes. Observations on *Nephrops*, *Nephrops* burrows abundance, sediment type, other benthic fauna and signs of anthropogenic activity will be recorded on to DVD. Distance travelled by the sledge, the depth the sledge is operating at and camera height will be monitored and recorded. Samples of the sediment will be taken at each station using the sledge mounted mini Van Veen sediment grab. If this system fails at any time, the traditional winch operated Day grab will be deployed. All sediment samples will be frozen.
2. **Trawling:** Fishing trawls of approximately 1 hour will be made on each sediment type within the survey area. A range of biological data will be collected on *Nephrops* and other shellfish.
3. **Drop Frame:** The drop frame will be used where conditions are not suitable for using the TV sledge, recording similar data as to the TV sledge.

General

TV work will normally take place during daylight hours. There may be a requirement for some trawling to take place in the evening.

Normal contact will be maintained with the Laboratory.

Submitted
A Weetman
1/12/2008

Approved
I Gibb
14/12/2008